1

2

3

4

UNITED STATES DISTRICT COURT

5

NORTHERN DISTRICT OF CALIFORNIA

6

7

8

SYNOPSYS, INC.,

Plaintiff,

9

v.

10

11

SIEMENS INDUSTRY SOFTWARE INC.,

Defendant.

Case No. 20-cv-04151-WHO

ORDER ON MOTIONS FOR SUMMARY JUDGMENT AND TO EXCLUDE

Re: Dkt. Nos. 316, 317, 318, 319, 320, 321, 323, 324, 337, 339, 341, 349, 354, 362, 364, 367

12

13

14

15

16

17

18

19

20

21

Plaintiff Synopsys, Inc. moves for summary judgment on defendant Siemens Industry, Inc.'s eleventh affirmative defense of non-infringement based on the scope of the parties' Patent License and Settlement Agreement ("PLSA") as determined in mandatory arbitration. Dkt. No. 316. Synopsys also moves to exclude in full the opinions Siemens's experts Dr. Stephen Melvin and Dr. Marilyn Wolf. Dkt. No. 321. Siemens moves for summary judgment of non-infringement of the two patents left at issue (the 614 Patent and the 915 Patent) and moves to limit the amount of possible damages. Siemens also moves to exclude the opinions of Synopsys's expert John. L. Hansen on reasonable royalty rates and three areas of opinion from Synopsys's expert Dr. Matthew Guthaus.

22

23

24

25

For the reasons explained below, Synopsys's motions for summary judgment and to exclude Melvin and Wolf are DENIED. Siemens's motion for summary judgment is GRANTED concerning the 614 Patent, DENIED on the 915 Patent, and GRANTED regarding foreign sales and failure to mark. Siemens's motion to exclude Hansen and Guthaus is DENIED.

26

LEGAL STANDARD

27

I.   MOTIONS FOR SUMMARY JUDGMENT

28

Summary judgment on a claim or defense is appropriate "if the movant shows that there is

1   no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of

2   law." Fed. R. Civ. Proc. 56(a). In order to prevail, a party moving for summary judgment must

3   show the absence of a genuine issue of material fact with respect to an essential element of the

4   non-moving party's claim, or to a defense on which the non-moving party will bear the burden of

5   persuasion at trial. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). Once the movant has

6   made this showing, the burden then shifts to the party opposing summary judgment to identify

7   "specific facts showing there is a genuine issue for trial." *Id*. The party opposing summary

8   judgment must then present affirmative evidence from which a jury could return a verdict in that

9   party's favor. *Anderson v. Liberty Lobby*, 477 U.S. 242, 257 (1986).

10   On summary judgment, the court draws all reasonable factual inferences in favor of the

11   non-movant. *Id*. at 255. In deciding a motion for summary judgment, "[c]redibility

12   determinations, the weighing of the evidence, and the drawing of legitimate inferences from the

13   facts are jury functions, not those of a judge." *Id*. However, conclusory and speculative testimony

14   does not raise genuine issues of fact and is insufficient to defeat summary judgment. *See*

15   *Thornhill Publ'g Co., Inc. v. GTE Corp.*, 594 F.2d 730, 738 (9th Cir. 1979). "If the nonmovant

16   bears the burden of persuasion on the ultimate issue, the movant may make its required initial

17   showing that there is no genuine dispute of material fact by demonstrating that 'there is an absence

18   of evidence to support the non-moving party's case.'" *Pac. Gulf Shipping Co. v. Vigorous*

19   *Shipping & Trading S.A.*, 992 F.3d 893, 897-98 (9th Cir. 2021) (first citing Fed. R. Civ. Proc.

20   56(c)(1)(A); and then quoting *In re Oracle Corp. Sec. Litig.*, 627 F.3d 376, 387 (9th Cir. 2010)).

21   "The burden of production then shifts to the nonmovant, who must go beyond the pleadings

22   and by her own affidavits, or by the depositions, answers to interrogatories, and admissions on

23   file, designate specific facts showing that there is a genuine issue for trial." *Id*. (internal quotation

24   marks omitted) (quoting *Celotex Corp.*, 477 U.S. at 324). "The nonmovant's burden of production

25   at this point 'is not a light one'—it 'must show more than the mere existence of a scintilla of

26   evidence' or 'some "metaphysical doubt' as to the material facts at issue.'"" *Id*. (quoting *Oracle*

27   *Sec. Litig.*, 627 F.3d at 387). The nonmoving party "must come forth with evidence from which a

28   jury could reasonably render a verdict in the non-moving party's favor," assuming that "all

2

1   justifiable inferences are . . . drawn in its favor." *Id*. (quoting *Oracle Sec. Litig*., 627 F.3d at 387).

2   ## II.   MOTIONS TO EXCLUDE EXPERTS

3   Federal Rule of Evidence 702 provides, "A witness who is qualified as an expert by

4   knowledge, skill, experience, training, or education may testify in the form of an opinion or

5   otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier

6   of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on

7   sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d)

8   the expert has reliably applied the principles and methods to the facts of the case." The court

9   "must assure that the expert testimony 'both rests on a reliable foundation and is relevant to the

10   task at hand." *City of Pomona v. SQM N. Am. Corp*., 750 F.3d 1036, 1043 (9th Cir. 2014)

11   (quoting *Primiano v. Cook*, 598 F.3d 558, 564 (9th Cir. 2010)). The testimony is "relevant if the

12   knowledge underlying it has a valid connection to the pertinent inquiry." *Id*. at 1044 (quoting

13   *Primiano*, 598 F.3d at 565). It is "reliable if the knowledge underlying it has a reliable basis in the

14   knowledge and experience of the relevant discipline." *Id*. (quoting *Primiano*, 598 F.3d at 565).

15   Though opinions may be excluded where "unreliable nonsense opinions," opinions will not be

16   excluded for being shaky or for being impeachable or even wrong. *See id*. (*citing Alaska Rent-A-*

17   *Car, Inc. v. Avis Budget Grp., Inc*., 738 F.3d 960, 969 (9th Cir. 2013)).

18   For reliability, the test looks at the "soundness of [the expert's] methodology" rather than

19   the correctness of the opinions. *Id*. (citation omitted); *see also* Fed. R. Evid. 702. Courts "must

20   act as a 'gatekeeper' to exclude 'junk science' that does not meet Rule 702's reliability standards

21   by making a preliminary determination that the expert's testimony is reliable." *Cooper v. Brown*,

22   510 F.3d 870, 943 (9th Cir. 2007). "Rule 702 demands that expert testimony relate to scientific,

23   technical or other specialized knowledge, which does not include unsubstantiated speculation and

24   subjective beliefs." *Id*.

25   ### DISCUSSION

26   ## I.   SYNOPSYS'S MOTION FOR SUMMARY JUDGMENT

27   Synopsys moves for partial summary judgment on Siemens's Eleventh Affirmative

28   Defense that Siemens has a full or partial license to the patented technology. Dkt. No. 367-3,

1   ("Syn. Mot."). Synopsys argues that it is entitled to judgment – precluding Siemens from raising

2   licensing as a defense in this case – because the license issue was determined in Synopsys's favor

3   by the Arbitration Tribunal ("ICC International Court of Arbitration" or "Tribunal") interpreting

4   the parties' June 2018 Patent License and Settlement Agreement ("PLSA").[1]   These parties (and

5   their predecessors) had engaged in multiple rounds of prior litigation leading to the PLSA. After

6   the parties entered the PLSA, Siemens purchased a company (Avatar) and released multiple

7   versions of the Aprisa software that Synopsys contends in this case infringes its 614 and 915

8   patents.[2]

9   **A.   PLSA and Tribunal Decision**

10   The parties submitted their dispute over whether the PLSA covers Aprisa to the Tribunal.

11   Dkt. No. 158-3 ("Tribunal Award") ¶ 3 ("the focus of the dispute is whether a product called

12   'Aprisa,' a place-and-route EDA tool being sold by Siemens, is a 'Siemens Licensed Product' as

13   defined in Section 1.15 of the PLSA."). The PLSA defined Siemens Licensed Products in Section

14   1.15 and provided that in the event Siemens acquired ownership of an entity, Siemens Licensed

15   Products:

16   shall not include any Products of such Excluded Entity as such
           Products existed on the date of such acquisition. For the avoidance of
17   doubt, to the extent Siemens or any Siemens Subsidiary modifies any
           Products of such Excluded Entity after the date of acquisition, only
18   such modifications shall be deemed Siemens Licensed Products.

19   *Id*. (Avatar was expressly identified as an Excluded Entity).

20   The issues submitted for determination to the Tribunal were:

21   a) whether the changes made by Siemens to Aprisa after its
           acquisition of Avatar gave rise to a license under the PLSA and, if so,
22   the scope of such license; and (b) whether Siemens is entitled to
           damages under the PLSA for Synopsys' alleged repudiation of a
23   license.

24   *Id*. ¶ 15. Before the Tribunal, Siemens argued:

25   that if "substantive" modifications are made post-acquisition to the

26

27   [1] These parties engaged in multiple rounds of prior litigation, leading to the PLSA.

28   [2] As noted below, Siemens's motion for summary judgment of non-infringement as to the 614
     Patent is granted.

product of an acquired Excluded Entity, the modified commercialized product falls within the scope of a "Siemens Licensed Product" under Section 1.15 of the PLSA, despite the specific language of the last clause of that section: "For the avoidance of doubt, to the extent Siemens or any Siemens Subsidiary modifies any Products of such Excluded Entity after the date of acquisition, **only such modifications** shall be deemed Siemens Licensed Products."

Id. ¶16 (emphasis in original).

The Tribunal noted that each side "approached the dispute from such different perspectives" that, at the conclusion of the hearing, the Tribunal asked the parties to confer with a view of reaching consensus on what questions were before the Tribunal. *Id.* ¶ 22. The parties' briefs did not provide consensus or clarity, but the Tribunal noted the questions focused on the "proper interpretation of the PLSA, particularly of Section 1.15, and whether the new Aprisa software product is a 'Siemens Licensed Product' under Section 1.15." *Id.* And "the primary issue to be determined is '[w]hether the changes made by Siemens to Aprisa after its acquisition of Avatar give rise to a license under the PLSA and, if so, the scope of such license.'" *Id.* (citing Terms of Reference).

During the Tribunal proceedings, Siemens argued that if it made "significant" and later "substantive" changes to Aprisa (meaning "operational changes"), then the changed "new Aprisa" would be covered by the license under the Section 1.15 definition of licensed products as a modified product. *Id.* ¶¶ 23-25. The Panel rejected that approach, concluding that "new Aprisa is not a 'Siemens Licensed Product' within the scope of Section 1.15, as explained below." *Id.* ¶ 25. In that further explanation, the Tribunal found that "modifications" to pre-existing products could theoretically be covered by the PLSA license (as opposed to the whole of a "modified product" as argued by Siemens), and noted the existence of "commercially available version control systems that can be used to track changes in software from version to version." *Id.* ¶ 31.

> Nor is it unusual in patent cases to isolate parts of a software program (usually related to a function) to prove infringement (as demonstrated by the expert testimony of Dr. Guthaus, testimony at 364) or to determine the value of certain parts of a software program vis-a-vis a whole product in an apportionment analysis. **Siemens knows what modifications it made to old Aprisa; those modifications are protected either under Section 1.15 of the PLSA or because they do not infringe any Synopsys patent.** It is part of the routine competitive landscape for a company like Siemens to determine whether its modifications are "meaningful" (the thrust of Dr. Melvin's

> expert opinion) or "substantial" (the word used by Siemens during the hearing) enough to risk launching a product that contains "old" remaining software of an Excluded Entity.

Id. ¶ 31 (emphasis added).

B.   Whether Siemens's Partial-License Defense is Barred

Based on this background, Synopsys moves for partial summary judgment and argues that any license defense based on the PLSA is foreclosed, under *res judicata*, because Siemens had the chance to make all arguments at the Tribunal, and argued and lost its position that new Aprisa was a "licensed product." Synopsys notes that both sides have continuously agreed, and I have found, that disputes over the scope of licenses provided under the PLSA must be determined by arbitration. Syn. Mot. (Dkt. No. 316-3) at 6. Now that the Arbitration has concluded and Siemens lost, Synopsys argues that Siemens cannot raise any type of license defense for Aprisa in this action.

Siemens acknowledges that it lost the argument it made at the Tribunal that new Aprisa was licensed as a whole, but notes that the Tribunal nonetheless explained that under the PLSA unspecified "modified parts" of new Aprisa could still be entitled to a license, reducing its liability for infringement here. Siemens argues that the Tribunal's Award injected this issue into this case. It also contends that given Synopsys raising new, post-Award infringement theories implicating new methods, software, or technologies in Aprisa that did not exist at the time the parties went to arbitration, Siemens cannot be faulted for raising the partial-license defense as an affirmative defense now.

On the merits of its defense, Siemens argues that because Synopsys failed to come forward with proof that no parts of new Aprisa were *modified enough* to be licensed, summary judgment should be denied and the modification questions should go to the jury.[3] Synopsys responds that if

---

[3] Siemens notes that, after the Tribunal decision, Synopsys came forward with new infringement theories (that allegedly target "new product versions and new and modified source code modules," Siemens Oppo. [Dkt. No. 339-2] at 13), but Synopsys does not attempt to identify whether those new theories are directed to modified new Aprisa (theoretically licensed) methods, software or technologies, or are aimed at not sufficiently modified new Aprisa methods, software, or technologies. Siemens argues that had Synopsys done that – presenting evidence on what in new Aprisa is sufficiently modified or not – Siemens would have responded with evidence of a host of modifications that it contends are licensed because they were significant modifications, including qrMaze.epp software as an example.

United States District Court
Northern District of California

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

1   its *res judicata* argument fails and considering the issue on the merits, it was Siemens's burden in

2   opposing summary judgment to come forward with affirmative evidence that new Aprisa was

3   modified significantly enough to qualify it for a partial license, but Siemens did not.

4   I will not enter summary judgment for either side on these competing "failure to produce

5   evidence" arguments regarding new Aprisa modifications. Instead, as discussed below, I find that

6   the modifications issue should be addressed in the first instance in arbitration.

7   Synopsys's main argument is that Siemens should not be able to switch horses mid-stream

8   and now, post-Award, argue that it is entitled to a modified-parts-license. Instead, Synopsys

9   wants Siemens bound – by *res judicata* or otherwise – to its one position taken in the Tribunal, the

10   rejected whole product license for new Aprisa theory. Whether Siemens is precluded by *res*

11   *judicata* from arguing that it has a partial license following the Tribunal Award is itself an issue

12   for arbitration. *See Chiron Corp. v. Ortho Diagnostic Sys., Inc.*, 207 F.3d 1126, 1132 (9th Cir.

13   2000) ("the question of whether [] res judicata defense to arbitration is itself an arbitrable issue is

14   bound up with the question of who should make such a determination. Although we have not had

15   previous occasion to consider this issue, we find the Second Circuit's analysis persuasive: a res

16   judicata objection based on a prior arbitration proceeding is a legal defense that, in turn, is a

17   component of the dispute on the merits and must be considered by the arbitrator, not the court.").

18   Synopsys asserts that *Chiron* does not govern here and is distinguishable because in

19   *Chiron,* in order to determine the preclusive effect of the arbitration award the arbitration

20   agreement and related evidence needed to be considered. Dkt. No. 316-3 at 8 n.5. But Synopsys

21   does not show why that is not the exact situation here. Siemens makes similar modification

22   arguments and uses the same expert with a substantially similar expert report that it relied on at the

23   Tribunal (where it argued modification results in a whole product license) and now argues

24   modification results in a partial-patent-license, but that is not significant. *See generally* Syn.

25   Reply (Dkt. No. 367-3). The PLSA contemplates ongoing licensing discussions between the

26   parties as products are modified, which is what Siemens asserts happened to Aprisa to create "new

27   Aprisa." Siemens also points out that Synopsys asserted new infringement contentions post-

28   Award that are directed, in part, to capture modifications present only in new Aprisa. Given this

7

1   context and these shifting sands, *res judicata* does not preclude Siemens from asserting a partial-

2   license defense.[4]

3   The issue before me is not simply enforcement of an arbitration award, it is the

4   interpretation of the PLSA and validity of the partial-license defense that the Tribunal suggested in

5   its decision.[5] For its part, Siemens contends that the comparison of the modified parts of Aprisa to

6   Synopsys's new infringement contentions should be determined by the jury and not be arbitrated

7   because it "too late and, on the merits, as impractical and an unreasonable reading of the Award

8   and the parties' intention in the PLSA." Dkt. No. 339-2 at 12. But as a backup, Siemens agrees

9   that the dispute over whether parts of new Aprisa were modified sufficiently or are new – and

10   therefore covered by a partial license – and whether Synopsys's new infringement contentions

11   target those modified Aprisa parts, requires Synopsys's motion for partial summary judgment to

12   be denied without prejudice to it being renewed after the "resulting negotiation, mediation, and

13   arbitration procedures have completed." *Id.* at 13. Synopsys agrees that if its *res judicata*

14   argument fails, the issue of whether parts of new Aprisa should be licensed it a question for

15   arbitration. *See* Dkt. No. 367-3 at 6-7 & n.5.

16   Whether parts of new Aprisa have been modified substantively or substantially such that

17   they are entitled to a license under the PLSA, and thereby reduce the possible infringement or

18   infringement damages, should be determined in arbitration.

19

20   [4] The cases Synopsys relies on are inapposite and do not address anything close to this situation.
     For example, *Trina Solar US, Inc. v. Carson-Selman*, No. 220CV1308JCMBNW, 2021 WL

21   9869720 (D. Nev. Oct. 29, 2021), addressed an enforcement action on an arbitration award. *See
     id.* *4 ("This suit is an enforcement action arising out of Trina's efforts to collect on an arbitration

22   judgment under the alter ego doctrine. Because the court has ancillary jurisdiction and finds that
     there is no new dispute arising under the Contract, Carson's motion to compel additional

23   arbitration regarding alter ego liability is DENIED."). *See also Thibodeau v. Crum*, 4 Cal. App.
     4th 749, 757 (1992) (applying res judicata to arbitration of homeowner's defection claims; claims

24   involved "same homeowner, the same home, and the same driveway. The Thibodeaus were
     obliged to assert their various claims of damage to the driveway in one proceeding."); *TriPharma,*

25   *LLC v. First Fruits Bus. Ministry*, No. SACV12404JVSANX, 2012 WL 12887079, at *14 (C.D.
     Cal. Aug. 21, 2012 (confirmed arbitration award reinstating exclusive license rights was binding

26   on parties in privity to defendant).

27   [5] Siemens is wrong to suggest that it should be me (or the jury) who has to interpret the PLSA to
     determine how "substantive" or "significant" a modification would have to be in order for a part of

28   new Aprisa to be entitled to a partial license. Those are tasks for the Tribunal under the PLSA.

1   Synopsys's motion for partial summary judgment based on the PLSA Award is DENIED.[6]

2   **II.   SYNOPSYS'S MOTION TO EXCLUDE MELVIN & WOLF**

3   In addition to moving for partial summary judgment on the partial-license defense,

4   Synopsys moves to exclude the expert opinions of two of Siemens's experts, Dr. Stephen Melvin

5   and Dr. Marilyn Wolf. Dkt. No. 321.

6   **A.   Melvin**

7   Melvin is proffered by Siemens to opine on "changes made to the Aprisa physical design

8   implementation tool, the significance of those changes and the relationship between those changes

9   and the April 2023 infringement contentions of Synopsys with regard to U.S. Patent No.

10   7,853,915 (the '915 patent') and U.S. Patent No. 8,234,614 (the '614 patent')." Melvin Opening

11   Report, Dkt. No. 321-9, ¶ 1; *see also* Melvin Rebuttal Report, Dkt. No. 321-10.[7] Synopsys moves

12   to exclude all of his opinions, arguing that he is unqualified to opinion on the Electronic Design

13   Automation ("EDA") "place-and-route" tools used to design semiconductor chips at issue in this

14   case. It argues that Melvin, who has a Ph.D. in computer science, is not qualified by education or

15   experience in EDA to meet the definition of a POSITA offered by Siemens's other technical

16   expert, Wolf. It is undisputed that Melvin has never worked, or personally engaged in, the design

17   or development of EDA tools and has no experience with EDA other than working as a consultant

18   or expert in other EDA-related litigation. Compounding his lack of experience, according to

19   Synopsys's expert, is Melvin's lack of understanding of EDA tools. *See* Supplemental Expert

20   Report or Dr. Matthew Guthaus (Dkt. No. 321-18) ¶¶ 14-19 (asserting Melvin did not load

21

---

22   [6] Related to the dispute over the meaning and impact of the Tribunal Award, Siemens moves to strike the portions of Synopsys's motion and exhibits in support that cite materials Siemens submitted to the Tribunal, including parts of Siemens's expert's report, its opening statement, and the parties' terms of reference. Siemens contends that Synopsys violated the parties' agreement that neither side could rely on any of Tribunal materials, except the Tribunal Award, in this litigation. Dkt. No. 337. Given the good faith, although rejected, *res judicata* argument and the necessary but limited citation of these materials in support of that argument, the motion to strike is DENIED.

26   [7] As explained below, Siemens's motion for summary judgment of non-infringement of the 614 Patent is GRANTED. However, as Melvin discusses both the 614 and 915 patents, I address the motion to exclude in full. Any testimony from Melvin that is relevant to the 614 Patent only would be subject to exclusion at trial, unless there is a basis for its admission as relevant to the 915 Patent as well.

United States District Court
Northern District of California

1   appropriate files for his tests or know how to display routes in EDA tools).

2   I am not persuaded. Melvin has over 30 years of involvement with chip design, including

3   designing the chip architecture for a multithreaded network processor. Melvin Opening Report, ¶

4   6, *see also id*. ¶¶ 5-10. He has also been appointed as an expert at least once in this District to

5   opine on "place and route" tools, and has experience writing programs in the language used by

6   Synopsys's expert Guthaus to test Aprisa's infringement. *See id*.; *see also* Melvin CV (Dkt. No.

7   321-17 at 3).

8   Melvin also satisfies the definition of a person of ordinary skill in the art ("POSITA") as

9   accepted by Synopsys's own expert, although he does not qualify as a POSITA under *Siemens's*

10   own infringement expert's definition. *Compare* Opening Report of Dr. Matthew Guthaus (Dkt.

11   No. 321-11) ¶ 41; *with* Opening Report of Dr. Marilyn C. Wolf (Dkt. No. 321-13) ¶ 26 (discussing

12   the "average or ordinary engineer"). That is sufficient at this juncture for his testimony regarding

13   the Aprisa software code and functionality, changes to the Aprisa code and functionality, and

14   testing of Aprisa, as well as his rebuttal testimony regarding testing Guthaus's programs and code

15   that Guthaus created to show Aprisa infringed. As Siemens points out, Melvin does not need to

16   qualify as a POSITA if he is not testifying *directly* on the "ultimate issues" of claim construction,

17   patent validity or infringement, for which an expert would need to be a POSITA. *See, e.g*.,

18   *Sundance, Inc. v. DeMonte Fabricating Ltd*., 550 F.3d 1356, 1361 n.3 (Fed. Cir. 2008) (noting that

19   claim construction, claim infringement, what specific prior art references disclose, and

20   obviousness are all determined "from the perspective of one of ordinary skill in the art").

21   Even though he may not testify on these ultimate issues at trial, Melvin's testimony is

22   relevant. For example, his testimony on the software at issue (whether and how source code was

23   changed and the impact of those changes) and how Aprisa does or does not work is relevant to

24   non-infringement. His rebuttal of Guthaus (who would consider Melvin a POSITA) approaches

25   POSITA-required testimony to the extent that he performs claim by claim analyses, but as long as

26   his trial testimony hews to how the programs function (relying on the claim definitions as I have

27   construed them), that testimony will likely be permissible. Synopsys's motion to exclude on

28   qualifications is DENIED. If, however, Melvin attempts to opine on the ultimate issue of non-

1   infringement at trial, Synopsys may object and move to exclude any such testimony.

2   Next, Synopsys moves to exclude Melvin because his opinions are generally offered for

3   the argument that it claims is barred by *res judicata,* analyzing changes between old Aprisa and

4   new Aprisa. *Res judicata* has been rejected, so that cannot justify barring Melvin's testimony.

5   *See supra.* Relatedly, Synopsys moves to dismiss his opinions as "irrelevant" as they do not

6   address validity of the patents or infringement by Aprisa. But as noted above, Melvin is not being

7   offered for the ultimate validity or infringement opinions; his testimony about changes in Aprisa

8   may be relevant to apportionment or willfulness. Synopsys's more general relevance objections

9   are better determined in the context of trial testimony.[8]

10   Finally, Synopsys moves to dismiss unidentified opinions in Melvin's Supplemental

11   Report[9] regarding the 2006.06 version of the IC Compiler because he fails to explain why the

12   2006.06 version purportedly embodies the 915 Patent claims, violating Rule 26(a)(2)(B)'s expert

13   disclosure requirements and *Daubert's* prohibition on *ipse dixit* reasoning.[10] Siemens is willing to

14   limit Melvin's testimony to the 2007 version that he addressed in depth, if Synopsys does not offer

15   a challenge based on the on sale date of the March 2007 version. Siemens MTE Oppo. (Dkt. No.

16   341-2) at 16. That limitation moots this last ground for exclusion.

17   Synopsys motion to exclude Melvin is DENIED, except for withdrawn testimony

18   regarding the 2006.06 IC Compiler.

19

20

21   [8] If Siemens attempts to rely on Melvin for "practicing prior art" defense, Sys. MTE (Dkt. No.
22   321-3) at 15-16 & Sys Reply MTE (Dkt. No. 367-4) at 11, that can be addressed by objection at
     the time of trial. Similarly, if any of Melvin's testimony at trial *depends* upon my claim
23   constructions, and Melvin deviates from those constructions, Synopsys may object at that time.
     Finally, that Melvin analyzed Synopsys's then current infringement contentions is a ground for
24   cross-examination, not exclusion, particularly given the recent amendments by Synopsys and
     Synopsys's inability to show that Melvin's arguments no longer have any relevance to the
25   amended contentions or Guthaus's analysis.

26   [9] Melvin's Supplemental Report concerns Synopsys's own IC Compiler product. Melvin
     Supplemental Report (Dkt. No. 321-12) ¶ 1.

27   [10] *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 137 (1997) ("Nothing in either *Daubert* or the Federal
28   Rules of Evidence requires a district court to admit opinion evidence that is connected to existing
     data only by the *ipse dixit* of the expert.").

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

B.   Wolf

Dr. Marilyn C. Wolf is proffered by Siemens "to consider and explain various issues related to the state of the pertinent prior art to the Asserted Patents and the disclosures of the Asserted Patents and their applications and how these issues pertain to the patent claims being asserted." Wolf Opening Report, Dkt. No. 321-13, ¶ 1; *see also* Wolf Rebuttal Report, Dkt. No. 321-15. Synopsys argues that Wolf's Opening Report relies on a prior art invalidity theory based on new references that Siemens could have raised, but did not, in its unsuccessful IPR challenge to the 614 Patent. For that reason, Synopsys argues that Siemens is barred by statutory estoppel from raising those reference now, and Wolf's discussion of these references is irrelevant and should be excluded. Dkt. No. 321-3 at 19-20 (identifying Saxena 2007 as a new reference). Siemens counters that Wolf is not providing an invalidity analysis, but instead offering testimony that some elements of the 614 Patent were "conventional," which is critical to apportionment for damages purposes.

I accept Siemens's position. At trial, if Wolf strays into invalidity based on references that were not part of the IPR, Synopsys can raise its objections based on estoppel at that time and testimony can be struck or limiting instructions given. But the challenged sections of Wolf's report will not be struck now.[11]

Second, Synopsys argues that unspecified portions of Wolf's Rebuttal Report regarding the 614 and 915 Patents improperly rely on the "untested" opinions of others; specifically, that Wolf admitted that she never personally operated Aprisa, never personally inspected its code, and never discussed Aprisa with Siemens's engineers but instead relied on Melvin and Siemens's attorneys' demonstrations of and testing of Aprisa's operations. Accordingly, Synopsys contends that Wolf's opinions are either unreliable or duplicative. However, each Report by Wolf identifies the materials on which she relied, and those sources extend beyond the opinions of Melvin and demonstrations of software by counsel. More fundamentally, reliability objections as well as

---

[11] Despite summary judgment being granted to Siemens on non-infringement of the 614 Patent, it is not clear to me that Wolf's prior art opinions and infringement opinions regarding the 614 Patent are irrelevant to the 915 Patent. Therefore, I address the full scope of Synopsys's objections to Wolf's testimony.

1   objections based on sources considered or not considered (*e.g.*, the entirety of the Aprisa user

2   manuals), are grounds for cross-examination, not exclusion. If at trial Melvin's opinions on how

3   Aprisa operates are undermined in the minds of the jury, Synopsys may challenge Wolf's reliance

4   on Melvin. It will also be free to rely on its expert or other testimony to attack any incorrect

5   assumptions Melvin made that Wolf necessarily relied on in her opinions. But those too are for

6   trial. Finally, the objections to duplicative testimony will be addressed if made at trial. That is not

7   a basis for exclusion now.

8   The motion to exclude opinions of Wolf is DENIED.

9   **III.   SIEMENS'S MOTION FOR SUMMARY JUDGMENT**

10   Siemens moves for summary judgment of noninfringement of both patents at issue.

11   "Summary judgment of no literal infringement is proper when, construing the facts in a manner

12   most favorable to the nonmovant, no reasonable jury could find that the accused system meets

13   every limitation recited in the properly construed claims." *Catalina Mktg. Int'l, Inc. v.*

14   *Coolsavings.com, Inc.*, 289 F.3d 801, 812 (Fed. Cir. 2002).

15   **A.   Patent No. 8,234,614 (614 Patent)**

16   Siemens first moves for summary judgment on the 614 Patent, arguing that Synopsys

17   cannot prove infringement. The asserted claims from the 614 Patent are claims 1-4, 12-13, and

18   16-19.

19   **1.   Representative Claim**

20   Siemens identifies claim 1 as a representative claim for purpose of its non-infringement

21   defense.

22   1. A method of routing a semiconductor chip's global nets,
          comprising:

23

24   ranking said semiconductor chip's global nets, wherein said ranking
          includes at least one of the following: ranking power/ground nets over
          clock signal nets; ranking power/ground nets over timing/slew critical

25   nets; ranking clock signal nets over timing/slew critical nets; ranking
          shorter length and lower fan-out nets over longer length and higher

26   fan-out nets;

27   identifying a subset of said global nets;

28   routing said subset of global nets using multiple threads, each of said

13

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

> global nets within said subset routed by one of said threads in isolation
> of said subset's other global nets;
>
> identifying a second subset of said global nets;
>
> routing said second subset of global nets using said multiple threads,
> each of said global nets within said second subset routed by one of
> said threads in isolation of said second subset's other global nets but
> in respect of the routes of said subset of global nets.

'614 8:52–9:5.

2.   Infringement of 614 Patent

Siemens argues that the asserted 614 Patent claims require "routing a second subset of

nets" after "routing a first subset of nets" and, significantly, "avoiding any conflict" between the

route of a second-subset net and a first-subset net. Dkt. No. 317-17 at 1. Because at claim

construction I rejected Synopsys's argument that some inter-subset conflicts were allowed, and

according to Siemens Aprisa allows inter-subset conflicts, Siemens argues that no reasonable jury

could find infringement.

Siemens contends that the 614 Patent does not allow "conflicts," meaning two or more

routed nets cannot occupy the same region (*i.e.,* typically a tile) of the semiconductor chip and that

my Claim Construction Order confirmed inter-subset (or "window") conflicts must likewise be

avoided, although the patents allow some intra-subset conflicts in limited circumstances. Claim

Construction Order, Dkt. No. 154. Based on that construction, it argues that Aprisa cannot

infringe because Guthaus (Synopsys's expert) admits that Aprisa routes nets from different subsets

within the same region and, therefore, allows inter-subset conflicts. Dkt. No. 317-17 at 2-4.

Siemens also contends that Synopsys's conduct in continuing to allege infringement of 614

Patent in this way, following my Claim Construction Order, is objectively baseless. Siemens

asserts that baselessness is shown by Synopsys's changed position; from agreeing with no inter-

subset conflicts during the IPR, to now pointing to Guthaus's October 2023 "validity report" to

argue a prohibited conflict only exists if two or more nets occupy the same spot on a wiring track

of a region causing a short circuit. *Id.* at 4-6.

Synopsys responds that Siemens's summary judgment argument is based on two errors.

First, Synopsys contends that nets can be disbursed in the same "region" (a term what was not

14

defined at claim construction or elsewhere), as long as conflicts are avoided. Guthaus says that

Aprisa avoids conflicts by routing second subset nets after and with knowledge of the routing of

the first subset nets. Second, Synopsys argues that Siemens relies on a new, "misguided"

definition of conflicts that likewise has not been defined and, according to Synopsys should

instead be understood according to its plain meaning; that nets cannot collide, interfere, or overlap.

According to Synopsys, the specification and claim language make clear that when nets from

different subsets are at issue, conflicts are easily avoided because the later subset is routed with

awareness of where earlier net subsets were routed. Dkt. No. 354-4 at 2-3. Synopsys claims that

Siemens's argument falls apart because:

> Although the 614 patent states—in connection with only one of three embodiments for determining whether there are *same* subset conflicts—that a "conflict exists if two or more routed nets occupy a same region of the semiconductor chip," it does not define the size of this "region where multiple routes trigger a conflict" other than to say that it could be the size of a "tile" or "smaller or larger than a tile" (614 patent 2:29–30, 6:54–57), nor does it say that a region is relevant for determining conflicts between different subsets. The inventors of the 614 patent did not say that the "region" triggering a conflict is any specific number of nanometers or fraction of the chip design, leaving that choice to the implementer.

Id. at 8.

After Siemens moved for a judgment of noninfringement of the 614 Patent, it was

Synopsys's burden to prove that Aprisa does not route two nets from different subsets in the same

"region" that otherwise would be a conflict. I agree with Siemens that "conflict" was defined in

the Patent as "two or more routed nets occupy[ing] [the] same region of the" chip. 614 Patent at

2:28-30. While Synopsys is correct that in the Claim Construction Order at 14-15 (Dkt. No.154), I

rejected reliance on passages in the patent's specification allowing intra-subset conflicts to justify

inter-subset conflicts, I did not reject the Patent's definition of a conflict. Nor am I now,

belatedly, construing a *claim*. I am applying the Patent's own definition of conflict. Guthaus

admits that Aprisa allows multiple nets from different, or inter-subsets, to be routed to the same

region. That defeats Synopsys's argument that a reasonable jury could find infringement

1   considering my claim construction and the patent's definition of conflict.[12]

2   Siemens's motion for summary judgment of non-infringement of the 614 Patent is

3   GRANTED.[13]

4   **B.   Patent No. 7,853,915 (915 Patent)**

5   Siemens also moves for summary judgment on the 915 Patent, arguing that Synopsys

6   cannot prove infringement. The asserted claims from the 915 Patent are 35-37, 39 and 43-44.

7   Siemens contends and Synopsys does not dispute that claims 35 and 51 are "representative" for

8   purposes of its argument on noninfringement of the 915 Patent.

9   **1.   Representative Claims**

10   35. A computer readable storage device comprising computer
      instructions that, when run on a computer, generate signals to control
11   the process steps of:

12   (a) ranking nets in a design based on unpredictability and expected
      quality-of-result impact;
13

14   (b) selecting a first predetermined top percentage of the ranked nets
      as first persistent nets;

15   (c) performing timing-driven global routing on the first persistent
      nets;
16

17   (d) back-annotating a timing graph with actual delays and parasitics
      determined by performing the timing-driven global routing on the
      first persistent nets;
18

19   (e) running synthesis for the nets in the design using the actual delays
      and the parasitics for the first persistent nets, wherein the synthesis
      maintains and updates routing for the first persistent nets;
20

21   (f) re-ranking the nets in the design after synthesis based on
      unpredictability and expected quality-of-result impact;

22   (g) selecting a second predetermined top percentage of the re-ranked
      nets as second persistent nets;
23

24

25   [12] This resolves Synopsys's attempt to give significance to "tiers" of regions.

26   [13] Accordingly, I need not address Siemens's second ground for judgment of non-infringement of
      the 614 Patent concerning claim elements that identify a subset of global nets. I note that
27   Synopsys initially failed to respond to this argument, only addressing it in a footnote in a belatedly
      filed Corrected Opposition. *Compare* Dkt. No. 317-17 at 6-6 (arguing Synopsys cannot prove
      Aprisa identified a subset of nets routed using multiple threads) *with* Dkt. No. 354-4 at 6 n.6
28   (cursorily addressing argument in footnote added to "Corrected Opposition").

United States District Court
Northern District of California

(h) performing timing-driven global routing on the second persistent nets that had not been selected among the first persistent nets;

(i) performing global routing on the nets of the design while maintaining the existing routes of the second persistent nets; and

(j) outputting a final layout of the design based on the global routing.

915 Patent 19:6–32 (915 Patent, ECF No. 1-1, 58–80).

51. A persistence-driven optimization tool executable by a computer and stored on a computer-readable storage device, the persistence-driven optimization tool comprising:

(a) a net selection module for filtering and ranking nets in a design based on unpredictability and expected quality-of-result impact, the net selection module outputting a list of selected nets;

(b) an interconnect-synthesis module for performing timing-driven topology generation, layer assignment, and global routing of the selected nets, the interconnect-synthesis module outputting persistent global routes having actual parasitics and delays for the selected nets;

(c) an interconnect-aware circuit optimization module for driving placement-driven optimization based on the actual parasitics and delays for the persistent global routes while maintaining and updating these persistent routes, the interconnect-aware circuit optimization module outputting an optimized design with the persistent global routes; and

(d) a global route translation and preservation module for translating the persistent global routes into a format recognized by the routing database as pre-existing global routes to be preserved during global routing, the global route translation and preservation module outputting a design file suitable for global routing followed by subsequent routing steps such as track assignment and detailed routing and post-route optimization.

915 Patent at 20:39–65.

2.   Infringement of 915 Patent

a.   Claims 35–37, 39, and 43–44

i.   Claimed Configuration

Siemens notes that initially Synopsys identified the asserted claims as method claims, but dropped that argument in September 2023. Now, Synopsys identifies these asserted claims as device claims: claiming a device storing executable instructions making a computer perform the ten-step method in claim 35 (on which claims 36-37, 39, and 43-44 depend).

Both sides agree that device claims can define the device by its configuration or

17

1   capabilities. Siemens argues that the relevant language is defining the device by its configuration,

2   and as a result the "comprising computer instructions" language in the relevant claims means the

3   claimed device *must* perform the steps, not simply have the capacity to perform the steps.

4   According to Siemens, in order to prove infringement Synopsys must be able to show that

5   Siemens made a computer-readable storage device configured with the same exact executable

6   instructions to perform the steps of the patent claims in the same order as identified in the claim

7   language. In other words, for Claim 35 the device must perform step (a) and then step (b) and

8   then step (c) and so on.

9   Siemens relies on *Ball Aerosol & Specialty Container, Inc. v. Ltd. Brands, Inc.*, 555 F.3d

10   984 (Fed. Cir. 2009), where the court distinguished capability claim language given the very clear

11   indication in the patent that a particular configuration was required, concluding that a device that

12   was simply "reasonably capable of being put into the claimed configuration would be insufficient

13   for a finding of infringement." *Id*. at 995. Siemens notes that the Federal Circuit has applied *Ball*

14   *Aerosol* to software-related claims. *See ViaTech Techs. Inc. v. Microsoft Corp*., 733 F. App'x 542,

15   551 (Fed. Cir. 2018) (where the claim language required the presence of a database, "the '567

16   patent can only be infringed if the digital content file is associated with an actual database as the

17   claim requires. A product having the capability of producing a database, *e.g*., containing the code

18   and raw license data of a database, is not enough."). Under this line of cases, Siemens contends

19   that Synopsys must prove that Aprisa has a computer-readable storage device configured to

20   perform the ten steps of claim 35 in the same order, and that Synopsys cannot prove infringement

21   – as its expert Guthaus has attempted – by showing that Aprisa is merely capable of generating the

22   required signals when combined with other instructions (the Guthaus scripts discussed below) not

23   stored on the storage device. *See* Dkt. No. 317-17 at 8-10.

24   Synopsys, initially, argues that each of the signals or commands that are invoked to

25   perform each step of claim 35 are present in Aprisa as sold, contrary to Siemens's

26   characterization. The Guthaus scripts, according to Synopsys, are simply software that Guthaus

27   used to invoke the signals/commands, causing Aprisa to perform the same claim process as Aprisa

28   was programmed to do. *See* Dkt. No. 354-4 at 13-14.   This turns on a question of fact, as

18

1   Synopsys says, and is not dispositive to Siemens's motion.

2   On the question of configuration versus capability, Synopsys argues that the claim

3   language defines capability, not configuration of the claimed elements. It relies on cases that

4   specifically discuss storage medium claims. *See, e.g., NetFuel, Inc. v. Cisco Sys. Inc.*, 438 F.

5   Supp. 3d 1031, 1035 (N.D. Cal. 2020) (discussing "[a] machine-readable storage medium that

6   provides instructions which when executed by a processor causes the processor to perform a

7   method," and concluding these "claims require only that the instructions be capable of causing a

8   method to be performed"). I agree. The claim language describes a device that is capable of

9   performing each of the required claim elements and the instructions to perform those steps,

10 according to the Synopsys expert and disputed by the Siemens expert, are present in Aprisa as

11 sold. That is sufficient to defeat summary judgment.

12 Concerning whether the steps must be performed in the order identified in claim 35,

13 Synopsys points to established cases considering when "the steps of a method claim that do not

14 otherwise recite an order, must nonetheless be performed in the order in which they are written."

15 *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369 (Fed. Cir. 2003). Courts must first "look to

16 the claim language to determine if, as a matter of logic or grammar, they must be performed in the

17 order written. [] If not, we next look to the rest of the specification to determine whether it

18 'directly or implicitly requires such a narrow construction.' [] If not, the sequence in which such

19 steps are written is not a requirement." *Id.* (citations omitted). Synopsys points out that Siemens

20 has failed to allege or argue in its motion whether or why there is a need or logic to *require* the

21 claim limitations to be performed in any particular order. Synopsys's expert, Guthaus, has

22 nonetheless explained how Aprisa is capable of performing all steps in the order of claim 35,

23 creating at most a dispute of fact. Guthaus Report, Section C ¶ at 46 (Dkt. No. 321-11).

24   **ii.   Even if Claims Recite Capabilities, No Infringement**

25 As an alternative ground, Siemens argues that if this is a capability claim, no jury could

26 find that Aprisa performs the ten ordered steps, even when combined with the "custom" scripts

27 Guthaus created to demonstrate infringement capability. Siemens relies on its expert Melvin, who

28 attempts to dismantle the Guthaus scripts and argues that Guthaus has not shown that Aprisa is

19

1   capable of practicing elements 35(a) & (f), 35(b)-(e) & (g)-(i). Melvin says that certain

2   functionalities have not been shown to satisfy each of the required commands. As one example,

3   he contends that Guthaus's "custom" program only showed preservation for a "small percentage"

4   of nets, and not all required nets. *See* Dkt. Nos. 317-17 at 11-12 & 364-2 at 6-7. These challenges

5   depend upon disputes of material fact between dueling experts and are not grounds for summary

6   judgment.

b.   Claim 51

8   Siemens admits that claim 51 is a capability and not a configuration claim and moves for

9   summary judgment because Synopsys: (i) has not shown Aprisa is capable of performing all of the

10 required elements of the claim; or (ii) has forfeited proving infringement of this means-plus-

11 function claim by failing to map the structures in the specification to structures in Aprisa.

i.   Performed Required Elements

13 Siemens first challenges Synopsys's showing that Aprisa can perform specific functions;

14 particularly the *ex ante* persistence to selected nets or their global routes required by 51(b) and

15 51(d), or that the persistent routes did not change in length. These challenges are akin to the ones

16 above with respect to claim 35. They fail for the same reasons, as they boil down to disputes of

17 fact regarding what Guthaus has shown regarding the capabilities of Aprisa.

ii.   Means-Plus-Function

19 Siemens next argues the third and fourth modules of claim 51 – 51(c) and 51(d) that are

20 prefaced by the word "for" and then then list functions like "driving," "maintaining," or

21 "outputting" – turn those parts of claim 51 into means-plus-function ("MPF") claims that require

22 identification of a structure in the specification that performs the MPF elements. Synopsys has not

23 identified the required structure in the specification.[14] Siemens's MPF argument – *if* Siemens is

24 correct that "for" in 51(c) and 51(d) requires analyzing this claim as a MPF claim – turns on

25

26 [14] "Section 112 ¶ 6 offers patent applicants two options: (1) recite, in the claim, a function without reciting structure for performing the function and limit the claims to the structure, materials, or acts disclosed in the specification (or their equivalents), in which case § 112 ¶ 6 applies, or (2)
27 recite both a function and the structure for performing that function in the claim, in which case § 112 ¶ 6 is inapplicable." *Dyfan, LLC v. Target Corp.*, 28 F.4th 1360, 1365 (Fed. Cir. 2022).
28

20

1   whether "modules" refer simply to functionality (if so, the claim language would need identified

2   structures to perform duties) or whether "modules" refers to "actual software" (if so, that is

3   satisfied by off shelf or well-known software routines and the failure to identify structures is not

4   fatal). Siemens contends that Guthaus fails to identify structures in the specification or actual

5   software that would perform these "unusual" routines, so Synopsys cannot demonstrate MPF

6   infringement. Finally, even if that were not the case, Siemens argues that because Synopsys did

7   not disclose this MFP infringement theory in its infringement contentions, Synopsys has waived

8   any MPF infringement. Dkt. No. 317-17 at 12-15.

9   Siemen's arguments fail if the "for" language identified in 51(c) and (d) does not invoke

10   the MPF test.[15] There is a rebuttable presumption where a claim does not use the word "means"

11   that the claim is not means-plus-function. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348

12   (Fed. Cir. 2015). As that is the case here, it is Siemens's burden to show that the claim language

13   itself does not recite sufficiently definite structure as understood by a person of ordinary skill in

14   the art. *Dyfan*, 28 F.4th at 1365. Synopsys notes that the Guthaus Report (Dkt. No. 345-22)

15   explains why a person of ordinary skill in the art would recognize specific structures described in

16   claim 51, and those structures were well-known in computer science, in the EDA context, and/or

17   in the art of place-and-route EDA tools. *Id.* ¶¶ 92-97, 103. Siemens's expert Wolf disagrees; this

18   is a dispute of material fact.

19   Siemens's motion for summary judgment as to noninfringement on the 915 Patent is

20   DENIED.

21   **C.   Damages**

22   If either of its noninfringement arguments are rejected on summary judgment, Siemens

23   also moves to limit the damages that Synopsys can seek at trial. It argues that Synopsys cannot

24

---

25   [15] "The overall means-plus-function analysis is a two-step process. [] The first step is to determine
     whether a claim limitation is drafted in means-plus-function format, which requires us to construe
26   the limitation to determine whether it connotes sufficiently definite structure to a person of
     ordinary skill in the art. []. If the limitation connotes sufficiently definite structure, it is not drafted
27   in means-plus-function format, and § 112 ¶ 6 does not apply. If, however, we conclude that the
     limitation is in means-plus-function format, we perform the second step of determining 'what
28   structure, if any, disclosed in the specification corresponds to the claimed function.'" *Id.* (citations
     omitted).

1   seek damages based on foreign revenue and that the damages period can only begin on June 16,

2   2020 in light of Synopsys failure to mark its products as patent protected.[16]

3   **1.   Foreign Sales**

4   Siemens argues that Synopsys provides no basis in its damages contentions or expert report

5   that justifies including foreign sales. Instead, Synopsys's contentions suggest that the base is

6   "revenue in the United States," and Synopsys's expert Hansen provides "primary calculations"

7   based on U.S. revenue. Therefore, Siemens seeks summary judgment that Synopsys is not entitled

8   to damages based on foreign revenue.

9   Synopsys responds that the parties (and the experts) dispute whether U.S. activity

10   "generated" foreign revenue that is compensable under U.S. patent law because damages on

11   foreign activity can be appropriate where they are the "result" of infringing activity in the United

12   States. Synopsys's theory of damages is that Siemens developed and tested Aprisa in the United

13   States, using the asserted patents, and therefore is liable for damages for "versions ultimately sold

14   abroad" as part of the reasonable royalty analysis. Syn. Oppo. at 20.

15   The cases Synopsys relies on are inapposite. There is no evidence that Siemens made

16   Aprisa copies in the United States and sells those copies internationally, and so there is no basis in

17   this case to seek monies from foreign sales. *See, e.g., Finjan LLC v. SonicWall, Inc.*, No. 17-CV-

18   04467-BLF, 2021 WL 11961438, at *21 (N.D. Cal. Mar. 17, 2021), aff'd in part, 84 F.4th 963

19   (Fed. Cir. 2023 ("to this end, the Supreme Court has made clear that liability does not 'extend to

20   computers made in another country when loaded with [ ] software copied abroad from a master

21   disk or electronic transmission dispatched by [defendant] from the United States.' Extending the

22   Supreme Court's logic to the instant case, Finjan must provide evidence that SonicWall makes

23   domestic copies of ESA code and sells those specific copies overseas. It has failed to do so.").

24   Other than testimony about foreign sales related to the determination of reasonable

25   royalties – that Siemens admits is relevant to determination of reasonable royalties – the foreign

26

27   ────────────────
     [16] Siemens also challenged the proposed reasonable royalty rate for the 614 Patent as not
28   appropriately apportioned. In light of the granting of summary judgment of non-infringement of
     the 614 Patent, this challenge will not be addressed.

1   sales themselves cannot be used as part of the royalty base. Siemens's motion is GRANTED

2   regarding foreign sales.[17]

3   **2.   Failure to Mark**

4   The appropriate starting date for damages, according to Siemens, depends on whether

5   Synopsys can prove compliance with the Patent Act's marking requirement.[18] Synopsys seeks

6   damages from at least June 2017. Siemens argues that the damages period begins no earlier than

7   June 16, 2020, when Synopsys first asserted infringement, because Synopsys did not "mark" its

8   products (Talus and IC Complier as relevant to the 614 Patent and IC Compiler 2 as relevant to the

9   915 Patent) made, offered for sale, or sold after the patents issued. Because the 614 Patent is no

10   longer at issue, only IC Compiler 2 remains at issue.

11   Generally, Synopsys contends that Siemens cannot limit the damages period because: (1)

12   Siemens failed to attempt to meet *its* "burden of production" in a timely manner (providing is first

13   supplemental contentions with only days left in fact discovery period and providing second

14   supplemental contentions after close of discovery), and (2) Siemens could not meet its burden in

15   any event because its contentions lacked the required details and citation in support to admissible

16

17   [17] Siemens's Administrative Motion to File a Statement of Recent Decision, citing *Brumfield,*

18   *Trustee for Ascent Trust v. IBG LLC*, No. 2022-1630, 2024 WL 1292151 (Fed. Cir. Mar. 27,
     2024), is GRANTED. Dkt. No. 399. That recent case clarifies the "causal connection" showing

19   required for a "foreign-conduct analysis in a reasonable-royalty case." *Id*. at *16. The parties
     have not identified anything in the record illuminating how that causal connection is satisfied here,

20   with respect to the alleged infringement of the 915 Patent, other than that Aprisa was developed in
     the United States. That conduct, standing alone, is insufficient for foreign-sales damages before

21   and after *Brumfield*.

22   [18] As explained in *Arctic Cat Inc. v. Bombardier Recreational Prod. Inc*., 876 F.3d 1350, 1365
     (Fed. Cir. 2017):

23   Pursuant to 35 U.S.C. § 287(a), a patentee who makes or sells a
                      patented article must mark his articles or notify infringers of his patent

24   in order to recover damages. . . . The patentee bears the burden of
                      pleading and proving he complied with § 287(a)'s marking

25   requirement. [] If a patentee who makes, sells, offers for sale, or
                      imports his patented articles has not "given notice of his right" by
                      marking his articles pursuant to the marking statute, he is not entitled

26   to damages before the date of actual notice. [] Section 287 is thus a
                      limitation on damages, and not an affirmative defense.

27

28   *Id*. at 1366 (internal citations omitted).

United States District Court
Northern District of California

1   evidence.[19]

2   Synopsys argues that Siemens failed to meet its initial burden for IC Complier 2 and the

3   915 Patent because Siemens's contentions never identify any product from Synopsys that Siemens

4   contends was sold, unmarked, after the issuance of the 915 Patent. Siemens responds that because

5   Synopsys identifies no other possible products that could be related to practicing the 915 Patent,

6   any failure by Siemens to identify IC Compile 2 in its contentions was harmless. I agree.

7   Siemens cleared the low burden and Synopsys has failed to come forward with evidence, within

8   its possession, to show that IC Compiler 2 was marked after the patent was issued. Siemens's

9   motion is GRANTED. The damages period begins no earlier than June 16, 2020.[20]

10   Siemens's motion for summary judgment of non-infringement is GRANTED concerning

11   the 614 Patent, DENIED for the 915 Patent, and GRANTED regarding foreign sales and the

12   failure to mark defense.

13   **IV.   SIEMENS'S MOTION TO EXCLUDE HANSEN & GUTHAUS**

14   Siemens also moves to exclude the opinions of Synopsys's damages expert, John L.

15   Hansen, on reasonable royalty rates, and the "apportionment" opinions of Synopsys's

16   infringement expert Dr. Matthew Guthaus, as well as identified infringement opinions concerning

17   the 614 and 915 Patents. Dkt. No. 319.

18

19   _____

20   [19] As the *Artic Cat* court explained:

21   We hold an alleged infringer who challenges the patentee's
             compliance with § 287 bears an initial burden of production to
22   articulate the products it believes are unmarked "patented articles"
             subject to § 287. To be clear, this is a low bar. The alleged infringer
23   need only put the patentee on notice that he or his authorized licensees
             sold specific unmarked products which the alleged infringer believes
24   practice the patent. The alleged infringer's burden is a burden of
             production, not one of persuasion or proof.

25   *Id*. at 1368.

26   [20] Given the grant of summary judgment to Siemens on the 614 Patent, I need not reach Siemens's
27   arguments regarding the marking defense for Talus and IC Compiler, as those products appear to
     be relevant only to the 614 Patent. However, if those products remain relevant, damages are
28   similarly limited to begin no earlier than June 16, 2020. I need not reach Siemens's argument that
     Synopsys failed to substantiate its "reasonably royalty" damages for the 614 Patent.

United States District Court
Northern District of California

A.   Hansen

Siemens moves to exclude Hansen's opinions on reasonable royalty rates for both the 614 and 915 patents because Synopsys did not rely on or disclose his *method* for calculating a reasonable royalty rate until its September 5, 2023 expert report, that was produced following the close of discovery. *See* Hansen Report, Dkt. No. 319-5. However, the sands in this case have been shifting due to *both* parties changing positions (sometimes taking arguably inconsistent positions) at various points in this litigation, including during IPR and pre-and post- claims construction. There is no prejudice to Siemens from the recent disclosure of the reasonable royalty methodology. Admitting that it took discovery on "some" of the topics relevant to a reasonable royalty (given the overlap between Siemens's former lost-profits theory and the newer royalty theory), Siemens nonetheless argues prejudice because it would have taken more targeted discovery on the topics it covered to "more precisely" test the margin and market share assumptions underlying Synopsys's royalty calculations.

Synopsys argues that it complied with its disclosure obligations, and any surprises in Hansen's report were due to Siemens's repeated delays in producing discovery. It also contends that it met its damages disclosure requirements by timely disclosing the intent to rely on a reasonable royalty rate and relying at that time, by necessity, on high-level and less detailed analysis than disclosed in its later-produced expert reports. In the higher-level reports, Synopsys's expert still addressed each *Georgia Pacific* factor and noted that documents Siemens had not yet produced that could impact the final damages calculations.

Siemens has not demonstrated prejudice from the arguably late disclosure of the royalty rate methodology; it may undertake its "more precise" testing at trial. Given the lack of prejudice to Siemens and that both sides have engaged in later disclosures – of necessary discovery, of more precise methodologies of damages – I will not exclude Hansen's opinions on reasonable royalty rates.

Beyond the timeliness challenge, Siemens makes numerous substantive challenges to Hansen's opinions. Given the ruling on the 614 Patent, I will not address its objections to royalty rates for the 614 Patent. For the 915 Patent, Siemens attacks Hansen's royalty rate because: (1)

1   the valuation method (identifying a particular performance improvement experienced by

2   customers who use the technology) is not tied to Synopsys's new "capability" infringement theory

3   for the asserted claims, (2) there is no basis provided for why the technical improvement translates

4   to economic value.

5   Siemens challenges Hansen's 915 royalty rate of 1.5% based on his estimate of the

6   advantage a customer achieves if they used the accused technique. Synopsys's infringement

7   contentions focus on the 915 Patent being "capable" of infringement when combined with code

8   written by Guthaus, but Siemens argues that Synopsys has not shown that anyone other than

9   Guthaus has used the Aprisa product in the same way that Guthaus did. Relatedly, Siemens

10   contends that because Hansen's rate relies on use, but Synopsys's infringement theory relies on

11   capability to do something (not actual use by actual identified users), his royalty rate "is based

12   exclusively on a benefit achieved only by non-existent users of the claimed method, [and] should

13   be excluded as not the product of reliable methods." Siemens MTE (Dkt. No. 319-3) at 16.

14   Synopsys responds that whether Aprisa is capable of performing every function of the 915

15   Patent, as it alleges, is Guthaus's opinion, not Hansen's. Hansen simply assumes what Guthaus

16   opines as a basis for his royalty rate, which patent damage experts are allowed to do. *See Fujifilm*

17   *Corp. v. Motorola Mobility LLC*, No. 12-CV-03587-WHO, 2015 WL 1737951, at *4 (N.D. Cal.

18   Apr. 8, 2015) (collecting cases). Synopsys asserts that in addition to Guthaus's opinion, Hansen

19   relied on internal documents showing that the patented technology can improve performance by

20   4.5% and it was reasonable to assign one-third of that improvement (or 1.5%) to reflect that value.

21   Challenges to the sources of Hansen's reasonably royalty rate – as well as Siemens's

22   complaint that Hansen failed to adequately correlate alleged improvement to "value" – all go to

23   weight, not admissibility, of Hansen's opinions. These challenges may be explored with Hansen

24   on cross-examination but are not grounds for exclusion.[21]

25   **B.   Guthaus**

26   Siemens moves to exclude three sets of opinions by Synopsys's expert Matthew Guthaus.

27

28   [21] Siemens's challenges to Hansen's other damages opinions all appear to be directed to the 614
     Patent. To the extent they are not, Siemens's may reraise them prior to or at trial.

1   The first two arguments appear to relate only to the 614 Patent (apportionment and Guthaus's

2   alleged reliance on a rejected claim construction) and will not be addressed.

3   The third argument is Siemens's objection to Guthaus's infringement contentions

4   regarding the 915 Patent based on "newly disclosed" theories and scripts invented by Guthaus. In

5   order to test whether Aprisa ran the steps the 915 Patent requires (capability question), Guthaus

6   created a custom "Tcl code" program to prove it. Siemens identifies one element from claim 35

7   (35i) as involving the newly disclosed scripts, noting that the scripts Synopsys used for its 4th

8   Amended Infringement Contentions ("4AIC") for 35i differ from the Guthaus expert report.

9   Siemens argues that the new script manipulates Aprisa in a different way, invoking different

10   functionality, and therefore the change is material and a blatant effort to show perseverance or

11   maintaining routes that were not shown under the 4AIC scripts but are required for 35i.

12   Guthaus was not deposed and it is not clear to me that the arguably new scripts depart from

13   the scripts disclosed in the 4AIC in such a substantial way that would cause prejudice to Siemens

14   or that they are excludable for other reasons. Siemens may attack Guthaus on these issues at trial

15   and the jury can resolve the material disputes of fact concerning what Aprisa can do under the

16   proposed manipulations caused by Guthaus's scripts.

17   Siemens's motion to exclude Guthaus is DENIED.

18   **V.   MOTIONS TO SEAL**

19   The parties have filed numerous motions to seal in connection with their motions for

20   summary judgment and to exclude. Dkt. Nos. 316, 317, 319, 321, 324, 337, 339, 341, 349, 354,

21   362, 367. Within twenty (20) days of the date of this Order the parties shall submit, after meeting

22   and conferring, a consolidated chart identifying all information that either party believes should

23   remain under seal under the compelling justifications standard. That chart shall identify each

24   word, line, or paragraph of information in a filing that a party believes should remain under seal

25   by docket number (including sub-docket numbers for exhibits) and by line or paragraph number.

26   The chart shall also identify, for each piece of information, a declaration in the docket (by docket

27   number and paragraph) that justifies the continued sealing.

28   In preparing the chart, the parties should be cognizant of information that is already in the

1   public record (through orders or publicly disclosed in hearings) and recognize that this case is on

2   the eve of trial. I will not seal the courtroom from the public during trial except perhaps for a very

3   limited time when truly critical confidential information must be discussed.   Information and

4   testimony that goes to the "heart" of claims or defenses that remain at issue are unlikely to remain

5   confidential, absent specific and compelling justifications shown that would merit closure of the
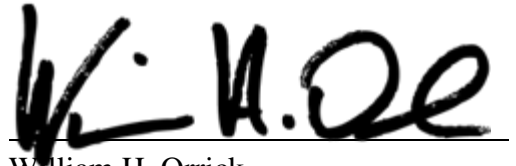
6   courtroom to the public.

CONCLUSION

7

8   Synopsys's motions for summary judgment and to exclude Melvin and Wolf are DENIED.

9   Siemens's motion for summary judgment is GRANTED on the 614 Patent, DENIED for the 915

10   Patent, and GRANTED regarding foreign sales and failure to mark. Siemens's motion to exclude

11   Hansen and Guthaus is DENIED.

12   **IT IS SO ORDERED.**

13   Dated: April 17, 2024

14

15

16   William H. Orrick
    United States District Judge

17

18

19

20

21

22

23

24

25

26

27

28

United States District Court
Northern District of California